

Readership : primary

# CURIOSITY KITS: THE IMPACT OF NON-FICTION BOOK BAGS ON BOYS' READING AT HOME

TOPIC  
ACTION

**Maureen Lewis, Ros Fisher, Teresa Grainger, Colin Harrison and Pam Hulme** explore the impact upon reading behaviours of book bags containing non-fiction books, related artefacts and linked activity sheets. They consider the impact of such bags upon reading in the home and upon the attitudes displayed by reluctant and struggling boy readers towards home/school reading materials. They suggest that the bags may have a positive role to play in increasing the number of books taken home and the range of people with whom they are shared, as well as being well received by the boy readers.

## WHAT ARE CURIOSITY KITS?

**Curiosity Kits** are book bags containing non-fiction books, along with related artefacts and activities. They are taken home from school for home reading. Class sets of such bags were placed in classrooms and their impact on home reading was monitored. While the book bags were available to all pupils, the major aim of the Curiosity Kit project was to capture the interest of reluctant and struggling boy readers. It was also hoped that Curiosity Kits might stimulate increased involvement in sharing the reading by other males within the home unit. A small-scale pilot project was undertaken with funding from the National Year of Reading (1998–99), and sponsorship from publishers and businesses, and with support from the UK Reading Association. During the year, identical sets of 30 bags (each bag in the set was based on a different topic) were placed in four Year 4 classes nationwide. The home-school reading patterns of four control classrooms were also monitored. The control schools were from the same area as the kit school and had pupils of the same age and from similar backgrounds.

The results from such a small-scale study must be treated with some caution and can only be regarded as indicative. However, given the current interest in identifying strategies to motivate boy readers and the impact the bags had in the classrooms involved in the study, we suggest that Curiosity Kits may be a potentially effective strategy that schools may wish to consider.

## THE CONTENTS OF THE CURIOSITY KITS



### Each Curiosity Kit consists of:

- Non-fiction book(s) selected on a topic likely to appeal to boys. The range included topics such as planes, trucks, comets, black holes, skateboarding, mountain bikes, reptiles, dinosaurs, the Internet, the body, volcanoes and hurricanes.
- A related toy or artefact (e.g. an airport play map and some toy planes, racing gloves and puncture repair kit, plastic reptiles and a video tape on reptiles).
- A wipe-clean word search related to the book.
- A wipe-clean design/draw activity (e.g. design a new tail fin for a plane, design a poster for a bike shop).

- A magazine on the same topic, aimed at adults; it was hoped that this magazine would encourage an adult male in the family to share the bag with the child.
- Comment stickers ('brilliant', 'OK', 'boring') for children to place on their reading record sheets with regard to their opinion of each kit.
- A comments notebook for any reader of the kit to comment upon it, if they wished.

The kits were contained in sports bags, often with a well-known and high-status logo. Such bags were chosen as being more likely to have 'street cred' than the bags typically used for book-bag schemes.

The bags and their contents were assembled during the autumn term of 1998 and placed in four classrooms in January 1999. Data collection took place throughout the school year, September 1998 to July 1999.

## WHY DO WE NEED CURIOSITY KITS?

The kits were created because of current concerns regarding boys' standards in literacy (1, 2). They were targeted at boys in Years 3 and 4 as any failure or lack of interest in reading is clearly apparent by this stage. Exciting and innovative ways to rekindle a declining interest are needed at this crucial point if enthusiasm for reading is not to flag further. However, the idea can be amended for pupils' of any age. The research into boy readers claims that some boys regard reading as a female activity (3–7) and so one aim of the kits was to encourage an older male to share the kit with the child – hence the magazine listed above. Research also shows that although preference for non-fiction materials is a minority preference, that minority is predominately male (8). Some boys prefer reading non-fiction materials but frequently book bag schemes tend to concentrate on fiction texts (9, 10).

## THE RESEARCH

Data were collected from eight classrooms (four kit and four control classrooms). They were collected pre and post the introduction of the kits, and included the following stages.

### ◆ Interviewing four target children from each of the classes (kit and control classes)

At the start of the project, class teachers identified four 'reluctant' or 'failing' boy readers in their classrooms. 'Reluctant' was defined as a boy with a reading age equal or above his chronological age but who showed no interest in reading beyond those occasions when he was required to do so by his teacher. Avoiding taking books home or rarely changing home readers was a further characteristic of the reluctant reader. 'Failing' was defined as a boy with a reading age two or more years below his chronological age. Teachers made the judgements on whom to include based on their own school's standardised test records and their own knowledge of

the pupils. These groups of four boys were interviewed in an informal group setting at the beginning of the year, before the kits were introduced and, again, at the end of the year after the kits had been used for two terms. A semi-structured interview schedule was used. The resultant group discussion was taped and transcribed. The boys were asked to describe what they read both in school and out of school; what, if anything, were their favourite reading materials; how they felt about reading; whether they typically read with anyone at home; when and where they typically read at home; and what kind of reading the adults in their family typically undertook.

### ◆ Collecting reading records throughout the year, for every child in the classes (kit and control classes)

For the first term, no kits were placed in any classroom and baseline data on reading patterns were collected via a reading record adopted by all the classes. This recorded any book taken home, whether it was fiction or non-fiction, whether the child read it on their own or whether it was shared with somebody (sometimes both types of reading took place). If the book was shared, the relationship (Dad, friend, sister, and so on) was recorded. These sheets were completed by the children but with assistance and reminders from the teacher. The record sheets were kept at school and filled in as books, and later, kits were returned. Such a recording system inevitably incorporates a degree of subjectivity and possible inaccuracy. 'Read' may include occasions where books are browsed through, and children may forget or exaggerate with whom they shared book or kit. However, as the recording conditions remained the same over the year, term on term comparisons were possible from these data.

### ◆ Inviting comments via a home/school notebook (kit schools only)

A notebook for comments was placed in each bag and adults were actively encouraged to comment via an invitation on the front cover and reminders via pupils.

### ◆ Interviewing teachers at the end of the year (kit schools only)

Teachers were asked their opinions on the kits, both the advantages and disadvantages, and their perceptions of the impact on pupils' attitudes towards reading and taking books home. They also passed on to us any anecdotal evidence from parents and pupils.

### ◆ Informal class discussions at the end of the year to hear the pupils' experiences and opinions regarding the kits (kit schools only)

Teachers or a researcher led a class debate on the use of the kits. In the kit classrooms the teachers were briefed to introduce the kits to the whole class by showing the contents of one or two kits to the children, and explaining that the kits could be taken home to use. The pupils were given an opportunity to browse through the kits, so that they were aware of the range of topics on offer before the loaning-out system began. The teachers were also provided with reading record sheets (see below) and a letter for parents explaining about the kits.

In this report, the results from only three pairs of schools are used in the numerical comparisons from the reading records, as we were unable to collect a full set of final term data from one of the kit classrooms where some children took home their reading record for the term. The pairs of schools reported are identified as A&B, C&D, E&F and G&H, with schools A, C, E and G being the kit schools. Kit school G is, however, included in the data concerning target pupil/parental/teacher and class comments.

## KEY FINDINGS

### *Evidence from the reading records*

Compared to the control schools, the kits had a marked and positive impact upon home reading in all the classes involved. For example, we discovered that:

- In schools A and C the total number of books taken home rose substantially after the introduction of the kits (see Table 1), suggesting an increased interest in this activity. In school E, however, the total number of books taken home falls. At first glance, this would seem to suggest that the introduction of the kits had had a negative effect in this school. Yet, closer examination of the reading records and discussion with the teacher revealed that, in this school, children were keeping the Curiosity Kits at home for longer periods of time than they had kept books, because they wanted more time to explore the kit and undertake the activities. Therefore, although the total home/school lendings had gone down, this reflected an increasing interest in the contents, not a declining interest in taking materials home.

In the control schools the number of books taken home remained relatively constant throughout the year, with only minor numerical variations over the year.

- The individual reading records of the four target boys in the kit classes showed that they all increased the number of books they took home once the kits were introduced. No such increase showed up in target boys in the control classes.
- Compared to pre-kit, home reading patterns, the range of people involved in shared readings within the home rose in the classes with kits (see Table 1). No increase in the range of people involved in shared readings was recorded in the control schools. The figures show that mothers remain the person most likely to share the home reading, but the increased male involvement of fathers and brothers may help boy readers to see reading as something that men engage with.

Comments written in the notebooks give further insight into the range of 'sharers':

*'Enjoyed by my son and his granddad. They both had great fun with this pack.'*

*'The kit created a lot of interest in our house. The whole family, including his elder brother and sister, were interested in his reading.'*

*'My son shared this bag with his older brother who is a keen skateboarder.'*

**Table 1 Comparison of whole class at home reading pre-kits and with kits**

School	A		C		E	
	Before kits	With kits	Before kits	With kits	Before kits	With kits
Total books/kits taken home	71	247	71	224	226	207
<b>Percentage of total reads:</b>						
Read on own	96	67.6	28.7	28.1	38.8	58
Mum	0	12.1	50	26.2	42.0	23
Dad	0	6.3	15	22	6.5	7.5
Brother	0	5.7	1.2	10.4	3.9	6.3
Sister	0	4.3	3.2	10.4	6.0	10.4
Grandmother	0	0	<0.5	1.2	2.4	1.5
Grandad	0	0	0	0	0	1.5
Friend	4	3.3	0	1.1	0	<0.5
Other (male)	0	0	1.5	<0.5	0	<0.5
Other (female)	0	0.6	<0.5	<0.5	<0.5	1.2

- All the boys in the kit classes increased the range of people with whom they shared the kits. Of particular interest was the impact in school A – an inner city, multi-ethnic school – where the kits had a huge impact on the reading patterns of all the boys in the class (see Table 2). Some of the impact of the kits in the first term was, no doubt, induced by the novelty value of the new resource. While the impact was less marked in the second term, it still represents a substantial change in the pattern of home reading for these boys and the sharing of the kits with fathers is maintained.

**Table 2 Comparison of boys' at home reading pre kits and with kits: School A**

Percentage of total home readings	Pre kits	After 1 term with kits	After 2 terms with kits
Read on own	96	39	83
Shared with Mum	0	24	11.1
Shared with Dad	0	20	10.4
Shared with brother	0	4.5	7.4
Shared with sister	0	7.5	4.4
Shared with Grandma	0	1	0
Shared with Grandad	0	3	0
Shared with friend	4	0	3.7
Shared with male other	0	0	0
Shared with female other	0	1	0
Range of people involved	1	6	5
Read with males (excludes on own)	0	27.5	18
Read with females (excludes on own)	4	33.5	15.5

### Evidence from the comment notebooks

Of the 268 comments received from parents in the four kit classrooms, more than 95 per cent were positive. The criticisms involved management issues, such as not having the bags for long enough or some mistakes in the word searches, rather than criticism of the concept.

- There was enthusiasm for the kits from both children and parents, although some kits appealed more than others and one or two were deemed boring. This was usually due to personal preferences:

*'Unfortunately, we as a family are not really interested in this subject [computers], so found it difficult to pick up the stuff and read it.'* (Mother)

Another comment on the same kit was:

*'My boy found this kit really fascinating, especially the section on virtual reality.'* (Mother)

- The word searches and activities were well received and often prompted further action; for example:

*'Kasim drew the poster several times, different pictures each time. He doesn't normally do word searches, but did this one quite quickly with interest.'*

- The toys/artefacts were universally enjoyed:

*'We found both the book and the magazine [mountain bikes] interesting and enjoyed reading them, as well as discussing the puncture repair kit. We enjoyed the pack and going for a ride, both physically and mentally.'* (Father)

*'The skipping-rope was a big hit. Played with for hours.'* (Parent, kit on athletics)

- Parents and children seemed to enjoy the wider learning opportunities offered by the kits:

*'We found this bag interesting and we all liked it because it is something we sit down together to and the kids are learning from us.'*

### Evidence from the interviews

The interviews with the target boys, the class discussions and the teachers also gave further insights into the impact of the kits.

- The targeted failing/reluctant boy readers displayed positive attitudes towards the kits and were happy to take them home. In their initial interviews, the target boys in both the kit and the control classrooms had mentioned a limited range of 'school' reading materials that they enjoyed. Of these, 'Goosebumps' and 'Horror Stories' were mentioned frequently and, to a lesser extent, 'Horrible Histories'. Their preferred reading at home included the small ads of the local newspaper ('to plan what [bike-related] things you would buy if you had the money'); items linked to video material such as 'Bed Bugs' and 'Little Soldiers' and small magazines given away inside 'Lucky Bags'. Such bags are distinguished along gender lines, with boys' bags and girls' bags, and are purchased from the local newsagents. None of the boys mentioned school-provided materials as being what they choose to read at home. In their final

interviews, however, five of the target boys from the kit schools spontaneously mentioned Curiosity Kits among their preferred home reading:

*'Yeah, I like the kits. They're better than taking reading books home 'cos they're good.'*

*'I really liked the one on monsters. I read it lots of times.'*

No change was noted in the home reading preferences, or in their attitudes towards reading described by the control groups in their end-of-year interviews.

- The kits had an impact upon other members of the family. Several children in the class discussions described an unexpected effect of the kits. When asked what their parents thought of the kits, we discovered that fathers, mothers, brothers and sisters were also choosing to read the kits for themselves, as well as in sharing with the pupils:

*'My Dad likes reading them himself, because he comes home from work really tired but reads all the things I've got in the Curiosity Kits.'*

*'It's different because my Mum, she reads everything in my bag and then she says, "Go and be good – go and get another one".'*

*'My older brother had my one on mountain bikes and he read it and read it. He wanted to keep the magazine. I hardly got to read it.'*

- All the teachers felt the kits were worth having and had had an impact on pupils' attitudes. Indeed, the four teachers involved all felt that the kits had had a major impact in the enthusiasm for and positive attitudes towards reading and taking books home. They reported real competition for some of the kits, and pupils avidly discussing the contents

of some of the bags. There were difficulties with management and storage, but once a routine was established, the teachers felt the advantages of the scheme far outweighed the disadvantages. All planned to continue to use the scheme next year and to disseminate it further within the school.

## ANY PROBLEMS?

All pupils (not just the boys) had definite opinions about the bags and their contents, which they expressed in teacher-led class discussions at the end of the year. Some topics were so popular that various 'waiting-list' systems had to be introduced. Only one or two of the bags relatively were not popular with the majority of readers (e.g. fishing). Teachers should be ready to withdraw unpopular topics and replace them with something else, as feeling positive and excited about the bag and its contents is an important aspect of the scheme. Pupils were strongly in favour of having the kits in backpacks rather than in the usual school reading-book type bag. To our surprise, however, some pupils vetoed the idea of bags with a high-status logo, because they were too desirable! Several children were worried such bags might get stolen and felt the responsibility of looking after them. They recommended that plain backpacks with no logos should be used if possible.

Other reported problems included the inevitability of some toys getting broken, pens lost and magazines becoming tatty. A regular monthly check of the bags' contents and a replacement policy would overcome those problems. It was also clear that some parents misunderstood the purpose of the magazine and complained it was too hard for the children, even though it had been explained that the magazine was intended for adults. A letter or briefing meeting for parents explaining the scheme was successfully used in two of the kit classes.



## CONCLUSION

Since the pilot project, many individual schools and some local education authority advisers have asked us for the practical leaflet on setting up a Curiosity Kit scheme. It is hoped that we may be able to follow up these contacts and undertake a larger-scale evaluation of the impact of non-fiction book bags. Certainly, the small-scale evaluation described above has indicated it to be a scheme with great potential. Bearing in mind the restricted nature of the pilot project, it would seem that the kits have had an impact on the range of people sharing home reading and on the number of books taken home. It particularly increased male involvement in home reading, and this has the potential to create positive role models for boy readers. The increase in the number of kits taken home (compared to books) by the targeted boy readers, and their enthusiastic comments about the kits during the final interviews and discussions, suggests that Curiosity Kits can have an impact on reluctant and failing readers. We would argue that the Curiosity Kits scheme is one schools might wish to consider as they strive to engage boy readers.

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### Leaflet

A practical leaflet for teachers explaining how to set up the scheme has been produced and is available by sending a stamped addressed A5 envelope to Maureen Lewis/Ros Fisher, Curiosity Kits, University of Plymouth, Rolle School of Education, Douglas Avenue, Exmouth EX8 2AT.

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